Bulletin of Environmental Contamination and Toxicology

Volume 29 • 1982

Springer-Verlag
New York • Heidelberg • Berlin

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher.

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Printed in U.S.A.

© 1982 Springer-Verlag New York Inc.

Acenaphthene, effect on growth of a blue-green alga 531
Aflatoxin, mutagenicity test with tulip bulbs 505
Alachlor, effect of laundering variables on decontamination 95
Alga, effect of polynuclear aromatic hydrocarbons on growth 531
Alkyl Phosphate, identification of residues in foods 221
Aluminum, neurotoxicity 43
Aminocarb, stability of Matacil in aqueous media 366
Ammonia, acute inhalation toxicity in mice 371
Aniline, fatty acid anilides in adulterated Spanish cooking oil 228
mutagen formation in aqueous nitrate solution 511
Anthracene, mutagen formation in aqueous nitrate solution 511
Arsenic, effect on filtering rate of brown mussel 651
levels in clams and oysters 50
prenatal effects in the hamster 671, 679
seasonal variations in bay mussel 665
uptake by intestinal epithelial cell suspensions 76
Aryl Phosphate, identification of residues in foods 221
Atrazine, sorption to marine fungi 101
Azinphosmethyl, decontamination of clothing with detergent 89

Benzanthracene, effect on growth of a blue-green alga 531
Benzene, multiple purge technique for water contamination 1
mutagen formation in aqueous nitrate solution 511
toxicity of chronic inhalation 385
Benzopyrene, mutagenicity test with tulip bulbs 505
residues in crab, fish, and lobster in New York 645
Biphenyl, mutagen formation in aqueous nitrate solution 511
Birds, effect of chemical dispersants and crude oil 404
effect of dispersant and oil on metabolic rate 520
effect of dispersant on growth and blood chemistry 273
effect of lead on health 177
effect of petroleum in food on adrenocortical responses 146
relationship between wet and dry tissue weights 615
seasonal brain acetylcholinesterase activity 360
Bromacil, decontamination of clothing with detergent 89
Bromophenol, structure-toxicity relationship on bacteria 130
Bromophos-ethyl, effect on microorganisms from honeybees 734
Butylated Hydroxytoluene, indication of tumor-promoting activity 115

Cadmium, accumulation and effects on guppy 159
effect on caddisfly species composition 306
effect on filtering rate of brown mussel 651
effect on meiosis 412
levels in clams and oysters 50
levels in crab, shrimp, and sediment in Saudi Arabia 313
levels in lobsters from the New York Bight area 711
relationship of blood pressure with hair concentrations 190

Cadmium, seasonal variations in bay mussel 665
transfer from cow milk to butter 658
Chloramben, field persistence studies 240
Chlordane, decontamination of clothing with detergent 89
residue trends in fish from the Northern Baltic Sea 334
Chlorine, toxicity to three life stages of striped bass 631
Chlorallyl Alcohol, search for residues in California well water 354
Chlorobenzene, mutagen formation in aqueous nitrate solution 511
Chlorobenzoate, cometabolism by Pseudomonas fluorescens 447
Chlorophenol, structure-toxicity relationship on bacteria 130
Chlorpyrifos, decontamination of clothing with detergent 89
uptake by intestinal epithelial cell suspensions 76
Chromium, blood pressure-hair concentration relationship 190
effect on filtering rate of brown mussel 651
levels in crab, shrimp, and sediment in Saudi Arabia 313
transport and fate in a freshwater lake 554
Chrysene, effect on growth of a blue-green alga 531
Clams, heavy metal concentrations 50
Cobalt, effect on filtering rate of brown mussel 651
levels in crab, shrimp, and sediment in Saudi Arabia 313
Copper, blood pressure-hair concentration relationship 190
effect on caddisfly species composition 306
effect on human erythrocytes with ascorbic acid 704
enrichment in five species of pondweeds 320
levels in crab, shrimp, and sediment in Saudi Arabia 313
seasonal variations in bay mussel 665
Corexit, effect on basal metabolic rate of ducks 520
effect on breeding ducks 404
effect on egg mortality of fish 525
Crab, heavy metal concentrations 313
polynuclear aromatic hydrocarbons in New York 645

2,4-D, occupational exposure studies 586
Daphnia, continuous-flow, bioassay technique 253
reproduction toxicity test 127
DDE, effects on mitochondrial respiration 577
estimation of levels in bats from guano analysis 214
DDT, column chromatography and acetonitrile partitioning 347
effects on mitochondrial respiration 577
levels in lobsters from the New York Bight area 711
residues of the o,p'-isomer in coastal sediment 429
residue trends in fish from the Northern Baltic Sea 334
uptake by intestinal epithelial cell suspensions 76
DDVP, effect of temperature on toxicity 605
Deoxynivalenol, embryotoxicity in mice 487
DFP, effect of temperature on toxicity 605
Diazinon, decontamination of clothing with detergent 89
enzymatic hydrolysis in soil 235
metabolism in fish liver preparations 455
Dibutyl Phthalate, uptake and phytotoxicity in corn 153

Dichloroaniline, attachment to soil humus 476
Dichlorophenol, structure-toxicity relationship on bacteria 130
Dichloropropene, search for resides in California well water 354
Dieldrin, column chromatography and acetonitrile partitioning 347
estimation of levels in bats from guano analysis 214
Diflubenzuron, effect on microorganisms from honeybees 734
Dinitramine, persistence in soil 483
Dinitrophenol, uptake by intestinal epithelial cell suspensions 76

EPTC, field persistence studies 243
Ethoxycoumarin, deethylation in rainbow trout 492

Fenitrothion, effect on microorganisms isolated from honeybees 734
Fish, accumulation and effects of cadmium 159
acute toxicity of iodine 7
acute toxicity of silver 184
acute toxicity of toluene to three age groups 12
chlordane, DDT, and PCB residue trends in the Baltic Sea 334
effect of crude oil and dispersant on egg mortality 525
effect of monochloramine on erythrocytes 637
effect of oil and PCBs on predatory-prey interactions 24
effect of suspended sediment on feeding 261
7-ethoxycoumarin deethylation 492
mercury concentrations as evidence of migration 544
metabolism of diazinon by liver preparations 455
PCB residues in Lake Geneva (Leman) 570
polynuclear aromatic hydrocarbons in New York 645
selenium accumulation and cytotoxicity 688
thyroid responses in rat fed Great Lakes salmon 341
toxicity of chlorine to three life stages 631
toxicity of toxaphene to cell cultures 68
Flame Retardants, identification of residues in foods 221
Fluoranthene, effect on growth of a blue-green alga 531
Fluorene, effect on growth of a blue-green alga 531
Folpet, effect on microorganisms isolated from honeybees 734
Fonofos, effect of laundering variables on decontamination 95

Heptachlor Epoxide, column chromatography/CH_3CN partitioning 347
estimation in bats from guano analysis 214
Hexachlorobenzene, column chromatography/CH_3CN partitioning 347
Hexachlorocyclohexane, column chromatography/CH_3CN partitioning 347
Histamine-producing Bacteria, detection and confirmation 618
Hydrogen Sulfide, adsorption behavior in molecular sieves 624

Iodine, acute toxicity to catfish 7
Iron, effect of emissions on a dune ecosystem 279
enrichment in five species of pondweeds 320
blood pressure-hair concentration relationship 190

Lead, blood levels in grazing cattle ingesting lead pellets 174

Lead, blood pressure-hair concentration relationship 190
effect on white Chinese geese 177
levels in blood after chronic feeding 550
levels in clams and oysters 50
levels in crab, shrimp, and sediment in Saudi Arabia 313
transfer from cow milk to butter 658
uptake and translocation in three food chains 697
Lindane, effect of sample storage conditions on residues 469
Lobster, Cd, DDT, Hg, hydrocarbons, and PCBs in New York 711
Lobster, polynuclear aromatic hydrocarbons in New York 645

Malathion, uptake by intestinal epithelial cell suspensions 76
Manganese, effect of emissions on a dune ecosystem 279
enrichment in five species of pondweeds 320
Mercury, concentrations in cod as evidence of migration 544
effect of microbial life stages on fate of MeHg 167
effect on filtering rate of brown mussel 651
levels in lobsters from the New York Bight area 711
levels in clams and oysters 50
physiological role of methylation in Clostridium 290
protective effect of selenium to MeHg 285
sedimentation in a lake due to peatland drainage 298
treatment with sodium dimercaptopropanesulfonate 416
Methoxychlor, effect of sample storage conditions on residues 469
Metribuzin, field persistence studies 243
Milk, residues of the synergist bis(tetrachloropropyl)ether 566
Mirex, tissue distribution and elimination by monkey 434
Molecular Sieve, adsorption behavior of H_2S inside microspores 624
Molybdenum, environmental monitoring with aquatic insects 422
Monochloramine, effect on trout erythrocytes 637

Naphthalene, effect on growth of a blue-green alga 531
mutagen formation in aqueous nitrate solution 511
toxicity to frog larvae 392
Nickel, blood pressure-hair concentration relationship 190
effect on filtering rate of brown mussel 651
levels in crab, shrimp, and sediment in Saudi Arabia 313
seasonal variations in bay mussel 665
transport and fate in a freshwater lake 554
Nicotine, uptake by intestinal epithelial cell suspensions 76
Nitrate, mutagen formation by photolysis of aromatic compounds 511
Nitrophenol, lethal and sublethal effects on mammalian cells 739

Oil, cleanup procedure prior to fingerprinting by GC or IR 29
contamination of shrimp 18
effect of dispersant on growth and blood of ducklings 273
effect on adrenocortical responses of ducks 146
effect on basal metabolic rate of ducks 520
effect on breeding ducks 404
effect on egg mortality of fish 525

Oil, effect on predator-prey interactions in fish 24
levels in lobsters from the New York Bight area 711
preparation and characterization of water-soluble fractions 268
recovery from sediment by steam distillation 539
toxicity to larval oyster 137
Oysters, heavy metal concentrations 50
toxicity of bilge cleaners and oil 137
Ozone, effect of methyl oleate ozonide on erythrocytes 498

Parathion, effect of temperature on toxicity 605
removal from fabric by laundering 461
Pentachlorophenol, collection of vapors from wood on silica gel 719
effect on electron transport activity of soil 727
lethal and sublethal effects on mammalian cells 739
structure-toxicity relationship on bacteria 130
Permethrin, uterine and fetal characteristics after exposure 84
Phenanthrene, effect on growth of a blue-green alga 531
Phenol, mutagen formation in aqueous nitrate solution 511
structure-toxicity relationship on bacteria 130
Phosalone, effect on microorganisms isolated from honeybees 734
occupational exposure of apple thinners 592
Phthalimide, effect on microorganisms isolated from honeybees 734
Pirimicarb, effect on microorganisms isolated from honeybees 734
Pirimiphos-methyl, effect on microorganisms from honeybees 734
Polonium, uptake and translocation in three food chains 697
Polybrominated Biphenyl, studies in an aquatic system 58
Polychlorinated Biphenyl, accumulation by a detritivore 326
continuous biodegradation 200
effect on human erythrocyte membranes 208
effect on mitochondrial respiration 577
effect on predator-prey interactions in fish 24
levels in Lake Geneva (Leman) fish 570
levels in lobsters from the New York Bight area 711
residue trends in fish from the Baltic Sea 334
separation from toxaphene by column chromatography 64
Polynuclear Aromatic Hydrocarbons,
determination in the New York Bight area 645
effect on growth of a blue-green alga 531
mutagenicity test with tulip bulbs 505
Procymidone, residues in foods imported into the USA 611
Propanil, field persistence studies 243
Propoxur, effect on cholinesterase activity in rats 599
Pyrene, effect on growth of a blue-green alga 531
mutagen formation in aqueous nitrate solution 511

Radium, uptake and translocation in three food chains 697

S-421, residues in human milk 566
Salmonella typhimurium, lack of mutagenicity of "hog-fuel" fly ash 517
metabolic activation of mutagens by tulip bulbs 505
Selenium, accumulation and cytotoxicity in teleosts 688

Selenium, effect on filtering rate of brown mussel 651
levels in clams and oysters 50
levels in urine relative to creatinine 37
protective effect on methylmercury toxicity 285
Shrimp, alkane residues 18
heavy metal concentrations 313
Silver, acute toxicity to fish and invertebrates 184
effect on filtering rate of brown mussel 651
Sodium Benzenesulfonate, mutagen formation in nitrate solution 511
Sodium Benzoate, mutagen formation in aqueous nitrate solution 511
Soil, enzymatic hydrolysis of diazinon 235
Styrene, effect on dopamine receptors 400

Tetrachlorodibenzo-p-dioxin, secretion in milk by dairy cows 440
Tetrachloroethane, enzymatic converstion to trichloroethylene 562
Tetrachloroethylene, effect on trichloroethane metabolism 196
Tetrachlorophenol, structure-toxicity relationship on bacteria 130
bis(Tetrachloropropyl)ether, residues in human milk 566
Thiram, effect on the crustacean Gammarus pulex 248
Toluene, acute toxicity to three age groups of fish 12
mutagen formation in aqueous nitrate solution 511
Toxaphene, effect on replication of goldfish virus-2 731
separation from PCBs by column chromatography 64
toxicity to cell cultures derived from goldfish 68
Triallate, field persistence studies 240, 483
Trichloroethane, metabolic suppression by tetrachloroethylene 196
Trichlorophenol, structure-toxicity relationship on bacteria 130
Trifluralin, field persistence studies 240, 483

Uranium, uptake and translocation in three food chains 697

Vomitoxin, embryotoxicity in mice 487

Water, multiple purge technique for determining organic pollutants 1
Worker Exposure, decontamination of clothing by laundering 89, 95

Zinc, blood pressure-hair concentration relationship 190
effect of emissions on a dune ecosystem 279
effect on caddisfly species composition 306
effect on filtering rate of brown mussel 651
enrichment in five species of pondweeds 320
levels in crab, shrimp, and sediment in Saudi Arabia 313
seasonal variations in bay mussel 665
transport and fate in a freshwater lake 554
Zinc Phosphide, enhancement of mammalian safety of baits 107